BE-3B CHASSI

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2181A	RM-833	Italian	SCC-G81L-A	*KV-X2182U*	RM-833	UK	SCC-G87G
KV-X2183B	RM-833	French	SCC-G85J-A				
KV-X2181D	RM-833	AEP	SCC-G77L-A				
KV-X2183E	RM-833	Spanish	SCC-G82K-A				
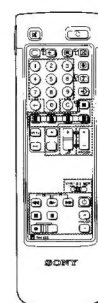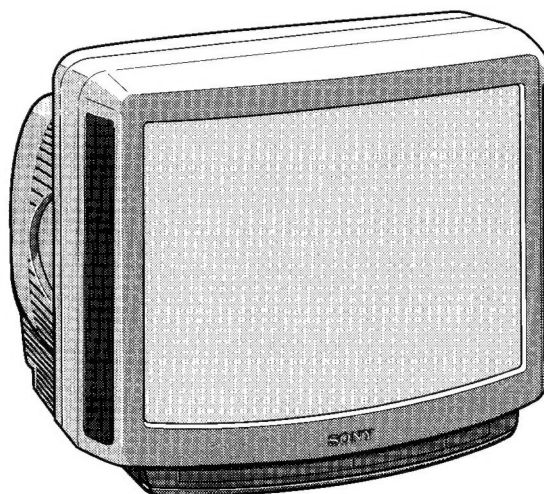
TRINITRON ® COLOR TV
SONY ®

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H, D/K	GERMAN Stereo	ITALIA VHF:A-H2 (C) PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H,L, I	GERMAN Stereo	L VHF:F02-F10 UHF:F21-F69 CABLE:B-Q S21-S44 B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) I UHF:B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF : B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

ODEL	Italian	French	AEP	Spanish	UK
ower Consumption	89W	89W	89W	89W	117W

SPECIFICATIONS

cture Tube   Hi-Black Trinitron
Approx. 54.5 cm (21 inches)
(Approx. 51 cm picture measured
  diagonally)
110° -deflection

put/Output Terminals

EAR]

·1 21-pin Euro connector (CENELEC standard)
  inputs for audio and video signals
  inputs for RGB
  outputs of TV video and audio signals
·2/⊟ 2 21-pin Euro connector
  inputs for audio and video signals
  inputs for S video
  outputs for audio and video signals (selectable)

[FRONT]
⊟3 Video input - phono jack
⊖·3 Audio inputs - phono jacks
⊟3 S video input 4-pin DIN
Ω   Headphone jacks : stereo minijack

Sound output	2 x 30W (Music power)
Dimensions	Approx. 517x443x485 mm
Weight	Approx. 26.5kg
Supplied accessories	RM-833 Remote Commander (1) IEC designation R6 battery (1)
Other features	NICAM , FASTEXT, TOPTEXT.

[RM-833]

Remote control system	infrared control
Power requirements	1.5V dc 1 battery IEC designation R6 (size AA)
Dimensions	Approx. 65x225x21 mm (w/h/d)
Weight	Approx. 157g (Not including batteries)

**Design and specifications are subject to change without notice.**

Model name / Item	KV-X2181A	KV-X2183B	KV-X2181D	KV-X2183E	KV-X2182U
Pal Comb	OFF	ON	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	OFF	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	OFF
Norm I	OFF	ON	OFF	OFF	ON
Norm D/K	ON	OFF	ON	OFF	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF
Toptext	ON	ON	ON	ON	OFF
Nicam Stereo	OFF	ON	OFF	ON	ON
Language Preset	Italian	French	German	Spanish	English

WARNING (KV-X2182U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ⬦ mark.
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME.
IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED.
THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.
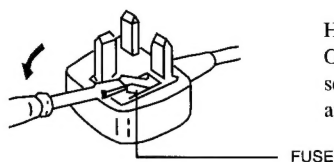
How to replace the fuse.
Open the fuse compartment with the screwdriver blade and replace the fuse.

FUSE

in connector (⛊-1 ⬔ 2 / ⬔ 4)
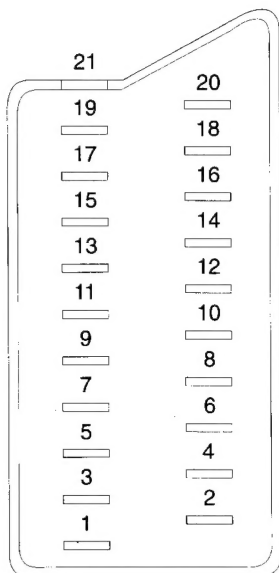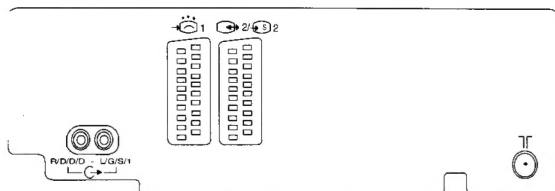
Pin No.	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance :Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance :More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance :Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance :More than 10kohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 ± 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground(blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
15	—	○	○	(S signal) croma input	0.3 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75ohms
17	○	○	○	Ground(video output)	
18	○	○	○	Ground(video input)	
19	○	○	○	Video output	1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB)
20	○	—	—	Video input	1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB)
20	—	○	○	Video input Y (S signal)	1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB)
21	○	○	○	Common ground (plug, sheild)	

○ Connected   ● Not Connected (open)   * at 20Hz - 20kHz

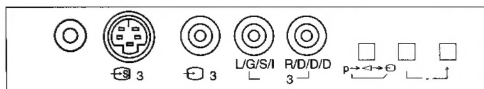| Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.

TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ L DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR I DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEU
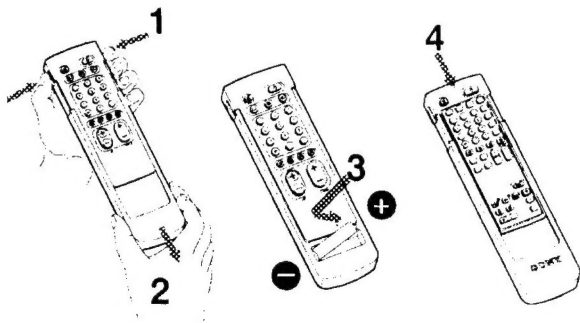
ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET P/ UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LE VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ D FONCTIONNEMENT, NE LES REMPLACER QUE PAR DE COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE ES INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

SECTION 1 GENERAL

Getting Started

Inserting the Battery Into the Remote Commander

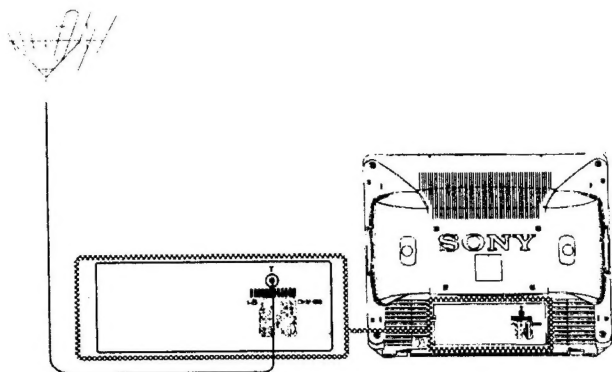| emove the cover. | Check the correct polarity. | Refit the outside cover making sure that the Full Function side is visible. |

out Battery Life
der normal operation, a battery will last up to half a year.

Connecting the Aerial

Connect aerial to the ℸℾ socket at the rear of the TV.
(cable not supplied)

Choosing a Language
ee inside of front cover and back cover)

Depress ① A on the TV.
The TV turns on. If the standby indicator B on the TV is lit, press ○ 3 or any number button 4 on the Remote Commander.

Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears.

MENU

---

3 Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.
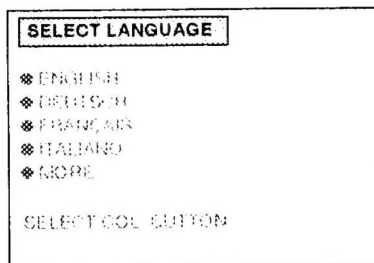
Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button 17 then press the white button 17 to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 100 channels to programme positions either automatically or manually.

| auto tuning: | A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations. |

| manual tuning: | Use if you are familiar with the channel numbers of stations. |

Choose the more appropriate way for you.

Tuning in to Channels Automatically
There are two possibilities for auto tuning;

A. On the TV: hold down ▶▶◻ E on the front of the TV for 2 seconds

or
B. On the Remote Commander: as follows

1 Press MENU 7.

2 Press the white button 17.

3 Hold down the red button 17 for 2 seconds,

Note: Press the green button 17 to cancel.

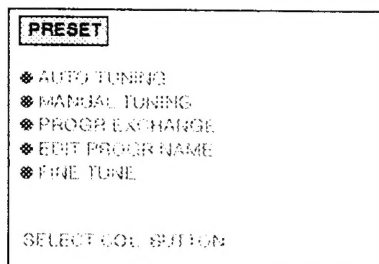
— 6 —

Tuning in to Channels Manually

1 **Press MENU [7].**
The MENU screen appears.

[MENU]

2 **Press the white button [17] to select PRESET.**
The PRESET screen appears.

```
┌─────────────────────────────┐
│ [PRESET]                     │
│                              │
│ ● AUTO TUNING                │
│ ● MANUAL TUNING              │
│ ● PROGR EXCHANGE             │
│ ● EDIT PROGR NAME            │
│ ● FINE TUNE                  │
│                              │
│   SELECT COL BUTTON          │
└─────────────────────────────┘
```

3 **Press the green button [17] to select MANUAL TUNING.**
The MANUAL TUNING screen appears.

```
┌─────────────────────────────┐
│ [MANUAL TUNING]              │
│                              │
│ 01  D/K  C21 ......          │
│ ● SKIP OFF                   │
│ ● OK                         │
│                              │
│   ENTER PROGR NO             │
│   USE NO BUTTONS OR          │
│   CHANGE BY MENU +/-         │
└─────────────────────────────┘
```
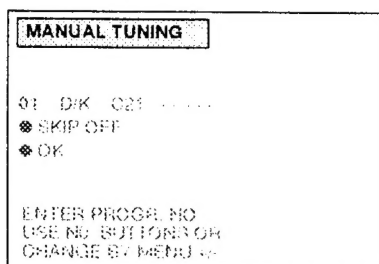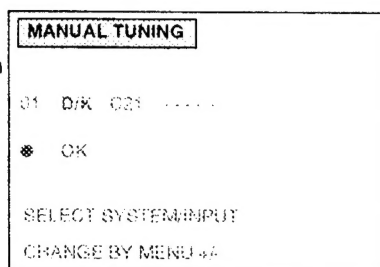
4 **Press the number buttons [4] or MENU+/– [9] to select a programme position.**
If you use the number buttons [4], enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

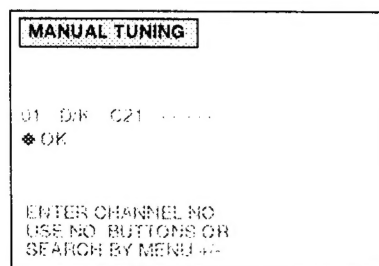**5** **Press the green button [17].**

Note: Use MENU +/– [9] to select TV system. You can alternatively select input sources which may be assigned to programme positions. The display changes as follows:

```
┌─────────────────────────────┐
│ [MANUAL TUNING]              │
│                              │
│ 01  D/K  C21 ......          │
│                              │
│ ●   OK                       │
│                              │
│   SELECT SYSTEM/INPUT        │
│                              │
│   CHANGE BY MENU +/-         │
└─────────────────────────────┘
```

B/G ⟷ D/K ⟷ AV1 ⟷ RGB ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

6 **Press the green button [17].**

Note: If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.

```
┌─────────────────────────────┐
│ [MANUAL TUNING]              │
│                              │
│ 01  D/K  C21 ......          │
│                              │
│ ● OK                         │
│                              │
│   ENTER CHANNEL NO           │
│   USE NO BUTTONS OR          │
│   SEARCH BY MENU +/-         │
└─────────────────────────────┘
```

7 **When you have selected B/G, press the red button [17] to select C (regular channel) or S (cable channel).**

8 **Press the number buttons [4] or MENU+/– [9] to select the channel number.**
If you use the number buttons [4], enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

9 **Press the green button [17] to store.**

Note: If you want to preset other channels, repeat step 4 to 9.

10 **Press MENU [7] twice to return to the normal screen.**

Note: You can skip unused programme positions when selecting programmes with the PROGR +/– buttons [18]. Press the red button [17] to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on
Depress ① [A] on the TV.

Turning off temporarily
Press ⏻ [10] on the Remote Commander.
The TV enters standby mode and the standby indicator [E] on the front of the TV lights up.

Turning on again
Press ◯ [3], PROGR+/– [18], or one of the number buttons [4] on the Remote Commander.

Turning off completely
Depress ① [A] on the TV.
Note: It is recommended to use ① [A] to turn off the TV. This could help you save energy.

Selecting TV Programmes
Press PROGR+/– [18] or press number buttons [4].

To select a double-digit number
Press -/-- [5], then the number buttons [4].

Adjusting the Volume
Press ◁+/– [19].

Muting the Sound
Press ⊄ [1].
To resume normal sound, press ⊄ [1] again.

Displaying the On-screen Indications
Press ⊕ [14] once to display the on-screen indications. Press again to make the indications disappear.
Note: If NICAM is transmitted regardless of whether it is stereo or mono, the two speaker symbol automatically appears on the screen for several seconds.

Operating the TV Using the Buttons on the T
With the buttons on the TV, you can adjust or select the functions as follows:
Press ◁+/– [D] to adjust the volume.
Press P+/– [C] to select programme numbers or to tur the TV on from the standby mode.
Press ⊕ [F] to select the input source.
Press ▶▶❙ [E] to preset channels automatically.

Operating the Menu System

ou can adjust picture and sound, preset channels to
ogramme positions and utilise other convenient features
/ using the following menu system.

Press;	to;
1 MENU [7] [MENU]	enter the MENU screen
2 a colour button [17] [■]	select an item you want to change (The selected item is marked by a triangle.)
3 MENU+/– [9] [+] [–]	change (or adjust) the contents of the item
4 MENU [7]	return to the MENU screen
5 MENU [7] again	return to the normal screen

Press MENU [7] once or twice whenever you want to
return to the normal screen.

ote: When selecting menus, the picture becomes darker.
, however, an item in the PICTURE ADJUSTMENT menu
selected, normal level of TV picture is restored to allow
ie best adjustment.

Adjusting the Picture and Sound

lthough picture and sound are adjusted at the factory you
an adjust them to suit your own taste.

I **Press MENU [7].**
The MENU screen appears. [MENU]

) **Press the red button [17] to select PICTURE or the**
green button [17] to select SOUND.

) **Press the respective colour button [17] to select an**
item.

| **Press MENU +/– [9] to adjust.**

) **Press MENU [7] twice or wait until the menu**
displays disappear automatically to return to the
normal screen.

PICTURE ADJUSTMENT
(First Page)

Press colour button	Effect
Red: For Picture ◑	Less ——I—— More
Green: For Colour ◉	Less ——I—— More
Yellow: For Brightness	Darker ——I—— Brighter
Blue: For Sharpness ①	Softer ——I—— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT
(Second Page)

Press colour button	Effect
Red: For Colour Tone	Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone)
Green: For Format	Normal: Normal setting 16:9 Wide screen effect
Yellow: For Picture Rotation (only for KV-X2981K)	Normal: Normal setting –5~+5: Adjusts the picture slant caused by the earth magnetism
Blue: For Hue control (only for NTSC video signals)	Reddish ——I—— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press ➔•← [8] on the Remote Commander to reset to
the factory preset levels for picture and sound.

SOUND ADJUSTMENT

(First Page)

```
┌─────────────────────────────────┐
│ │SOUND ADJUSTMENT│              │
│                                  │
│  ▶ ...⊃  ▦▦▦▦▦▦▦▦▦▦▦▦           │
│  ◈ ;   ▦▦▦▦▦▦▦▦▦▦               │
│  ◈ ⌐   ▦▦▦▦▦▦▦▦▦                │
│  ◈ ⌐...  ▦▦▦▦▦▦▦▦▦▦▦▦▦▦        │
│  ◈ MORE                          │
│                                  │
│  SELECT COL BUTTON               │
│  ADJUST BY MENU +/-              │
└─────────────────────────────────┘
```
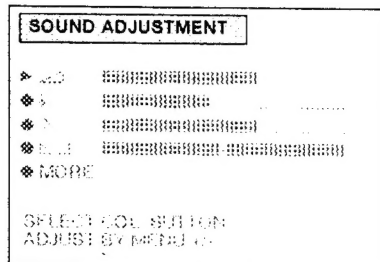
Press colour button	Effect
Red: For Volume ◿	Less ——I—— More
Green: For Treble ♦	Less ——I—— More
Yellow: For Bass ?	Less ——I—— More
Blue: For Balance ◹◺	More left - more right
White:	Next page of SOUND ADJUSTMENT

SOUND ADJUSTMENT

(Second Page)

```
┌─────────────────────────────────┐
│ │SOUND ADJUSTMENT│              │
│                                  │
│  ▶ SPACE SOUND OFF               │
│  ◈ LOUDNESS OFF                  │
│  ◈ ◁ STEREO                      │
│  ◈ RESET                         │
│  ◈ BACK                          │
│                                  │
│  SELECT COL BUTTON               │
│  CHANGE BY MENU +/-              │
└─────────────────────────────────┘
```

Press colour button	Effect
Red: For Space Sound	OFF: normal sound ON: for a special acoustic sound effect
Green: For LOUDNESS	OFF: normal sounds ON: when listening to music broadcast
Yellow: For Stereo:	Stereo -> Mono A (left channel) -> Mono B (right channel) -> Mono
Blue: For Reset:	Resets to the factory preset levels for picture and sound
White:	Back to first page of SOUND ADJUSTMENT

Note: Press ➔•◀ [8] on the Remote Commander to reset to the factory preset levels for picture and sound.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer .

1 Press MENU [7].
The MENU screen appears.

[MENU]

2 Press the yellow button [17] to select FEATURES.

3 Press the respective colour button [17] to select an item.

4 Press MENU +/– [9] to change.

5 Press MENU [7] twice or wait until the menu displays disappear automatically to return to the normal screen.

FEATURES

```
┌─────────────────────────────────┐
│ │FEATURES│                      │
│                                  │
│  ▶ SLEEP TIMER OFF               │
│  ◈ PARENTAL LOCK OFF             │
│  ◈ TV BUTTON LOCK OFF            │
│  ◈ DEMO MODE                     │
│  ◈ LANGUAGE                      │
│                                  │
│  SELECT COL BUTTON               │
│  CHANGE BY MENU +/-              │
└─────────────────────────────────┘
```
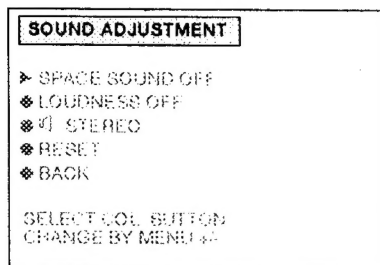
Press colour button	Effect
Red: For Sleep Timer (Automatic switch off function)	OFF -> 0:30 -> 1:00 -> 1:30 -> 2:0((hours) After the selected time the TV set switches itself automatically into standby mode.
Green: For Parental Lock (For preventing children from watching programmes which you consider unsuitable)	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this wa you can prevent undesirable broadcasts from appearing on the screen.
Yellow For TV Button Lock	OFF: Normal setting ON: The buttons on the TV do not function anymore. (The Remote Commander still operates)
Blue: For Demo Mode	ON: A sequence of menu pictures is displayed. Press any button on the Remote Commander to stop the function.
White: For Language	The SELECT LANGUAGE screen appears.

Advanced Presetting Functions

xchanging Programme Positions

ou can exchange the programme positions to a preferred der (example: exchange programme 09 (channel C21) th programme 15 (channel C24).
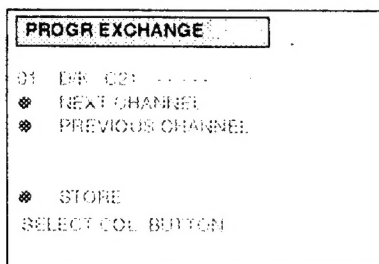
Press MENU [7].
The MENU screen appears.

[MENU]

Press the white button [17].
The PRESET screen appears.

Press the yellow button [17].
The PROGR EXCHANGE screen appears.

```
┌─────────────────────────┐
│ PROGR EXCHANGE          │
│                         │
│ 01  D/K  C21  ·····     │
│ ●  NEXT CHANNEL         │
│ ●  PREVIOUS CHANNEL     │
│                         │
│ ●  STORE                │
│ SELECT COL BUTTON       │
└─────────────────────────┘
```

Press the white button [17] repeatedly until the desired programme number (09) appears.

Press the red or the green button [17] repeatedly until the desired channel number (C24) appears.

Press the white button [17] to store.
Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.

Press MENU [7] twice to return to the normal screen.

diting Programme Names

ou can edit the programme names up to five letters.

Press MENU [7].
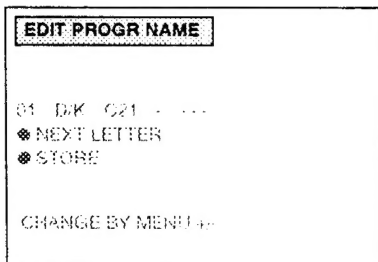The MENU screen appears.

[MENU]

Press the white button [17].
The PRESET screen appears.

Press the blue button [17].
The EDIT PROGR NAME screen appears.
The first character flashes.

```
┌─────────────────────────┐
│ EDIT PROGR NAME         │
│                         │
│ 01  D/K  C21  ·····     │
│ ● NEXT LETTER           │
│ ● STORE                 │
│                         │
│ CHANGE BY MENU +-       │
└─────────────────────────┘
```

4 Press MENU+/– [9] to edit the first letter.
The first letter changes as follows;

$$A \leftrightarrow B \leftrightarrow \ldots \leftrightarrow Z \leftrightarrow 0 \leftrightarrow 1 \leftrightarrow \ldots \leftrightarrow 9 \leftrightarrow \text{"–"} \text{ (space)}$$

5 Press the red button [17] to move to the next letter.

6 Repeat steps 4 to 5, until the fifth letter is chosen.

7 Press the green button [17].
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

Fine Tuning

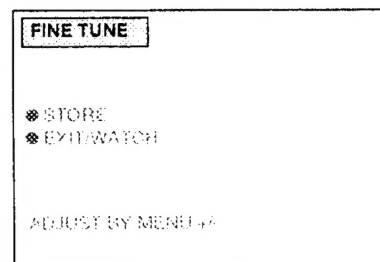You can adjust the receiving condition by the FINE TUNE function.

1 Press MENU [7].
The MENU screen appears.

2 Press the white button [17].
The PRESET screen appears.

3 Press the white button [17] again.
The FINE TUNE screen appears.

```
┌─────────────────────────┐
│ FINE TUNE               │
│                         │
│                         │
│ ● STORE                 │
│ ● EXIT/WATCH            │
│                         │
│ ADJUST BY MENU +-       │
└─────────────────────────┘
```

4 Press MENU+/– [9] to adjust the receiving condition.

5 Press the red button [17] to store the adjustment, or press the green button [17] not to store.
Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

1 Press C [16] on the Remote Commander. For cable channels, press C [16] twice.
The indication "C" ("S" for cable channels) appears on the screen.

2 Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).
The channel appears.
However, the channel is not stored.

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.
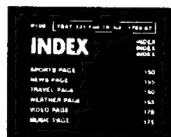
Basic Teletext Operation

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press ⊜ [11] to display Teletext.
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 Input three digits for the page number using the number buttons [4].
The numbers are displayed on the screen and the requested page appears in a few seconds.
Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 Press ○ [3] once or ⊜ [11] twice to return to the TV mode.

Note: To change the teletext channels. First press ○ [3] to return to the TV mode, then repeat steps 1 to 3.
Note: If the signal of a TV channel is weak, teletext errors may occur.

Advanced Teletext Operation

Using Fastext
With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons [6] on the Remote Commander.
Press the corresponding colour button [6] on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page
Press ⓘ [17]. The Index page appears.

Accessing the next or preceding page
Press ⊡ (PAGE +) or ⊡ (PAGE –) [18]. The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture
Press ⊜ [11] once if you are in text mode or press ⊜ [11] twice if in TV mode.
To return to the normal teletext display press ⊜ [11] twice.

Preventing a teletext page from being updated or changed
Press ⊕ (HOLD) [2]. The HOLD symbol (⊕) appears on the screen and the selected subpage is held until you press ⊜ [11] to cancel.

Enlarging the teletext display
Press ⊕ [13] once to enlarge the upper half. Press twice t enlarge the lower half. Press again to restore the normal display.

Revealing concealed information (e.g. answers to a quiz
Press ⑦ (REVEAL) [14]. The information is revealed. Pres ⑦ [14] again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

2 Press ⊠(TEXT CL) [12].
The TV programme is displayed and the symbol ⊜ is displayed at the top of the page.
Note: When the requested page is available the page number is displayed at the top of the screen.

3 Press ⊜ [11] to view the page.

Note: To cancel the request
Display the teletext page, then press ⊜ [11]. The request i now cancelled. Press ○ [3] to resume TV mode.

Using the Favourite Page system
You can store up to four of your favourite teletext pages pe programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

1 Select the page you would like to store using the number buttons [4].

2 Press ⊹ [15] twice.
The colour prompts at the bottom of the screen flash.

3 Press any of the colour buttons [6] on the Remote Commander to store the selected page.
The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 Press ⊹ [15].

2 Press the colour button [6] corresponding to the colour prompt onto which the desired page is stored
The page is requested. (It may take a few seconds to b received).

Note: Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode
Press ⊙ [12] to request the time. Press again to cancel the request.
Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
⊡1 [M] (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
[S]→2/⊡2 [L] (AV2) (YC2)	Audio/video and S video signal	Audio/video signal from selected source
⊕3/⊙3 [G][H] (AV3)	Audio/video signal and	No outputs
⊕3/⊙3 [G][I] (YC3)	Audio/S video signal	

To watch a video input picture, press ⊕ [2] until the desired video input appears.
To return to the normal TV picture, press ⊕ [2] repeatedly or press ◯ [3].

Note: If you have a decoder, connect it to ⊡ 1[M].

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal [K] of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 6.

Note: S video input (Y/C input) [I][L]
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
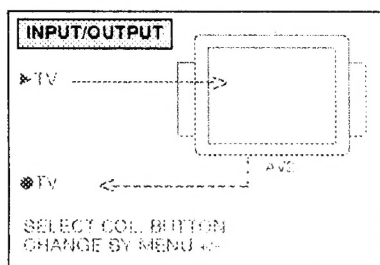Separating the Y and C signals prevents them from inter-

Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selection using this menu.

Checking the Input and Output Sources
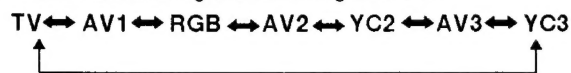
1 Press MENU [7].
The MENU screen appears

2 Press the blue button [17] to select INPUT/OUTPUT.
The INPUT/OUTPUT screen appears.

```
┌─────────────────────────────┐
│ INPUT/OUTPUT                 │
│                              │
│ ►TV ----------┌───┐          │
│              ┌┤   ├┐         │
│              ││   ││         │
│              └┤   ├┘         │
│               └───┘          │
│ ●TV ◄--------------- AV2      │
│                              │
│ SELECT COL BUTTON            │
│ CHANGE BY MENU ←             │
└─────────────────────────────┘
```

Selecting an Input Signal

Press the red button [17] to select INPUT. Press MENU +/– [9] to select the desired input source.
You can select among the following sources:

TV↔ AV1 ↔ RGB ↔AV2↔ YC2 ↔AV3↔ YC3

Selecting an Output Signal

The [S]→ 2 /⊡2 connector [L] outputs the source input from the other connectors. Press the green button [17] to select OUTPUT. Press MENU +/– [9] to select the desired output source.

You can select among the following sources:

TV ↔ AV1 ↔ AV2 ↔ YC2 ↔ AV3 ↔ YC3
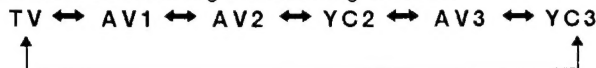
Note: Press MENU [7] twice or wait until the menu displays disappear automatically to return to the normal screen.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector [20] according to the equipment you want to control:
VTR 1: Beta VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disc Player

2 Use the buttons [21] to operate the additional equipment.

Note: If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
Note: If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.
Note: When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack [J], then the sound from the speakers goes off.

Note: You can't control the sound adjustment except for volume.

For your information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound

- Plug the TV in.
- Press ① [A] on the TV. (If the standby indicator [B] is lit, press ○ [3] or any number button [4] on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ① [A].

Poor or no picture (screen is dark), but good sound

- Press MENU [7] to enter the MENU screen, and press the red button [17], then adjust ◑ and ⬝.

Good picture but no sound

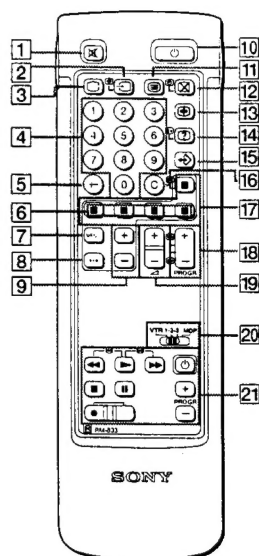- Press ◁+ [19].
- If ⧫ is displayed on the screen, press ⧫ [1].

No colour for colour programmes

- Press MENU [7] to enter the MENU screen, and press the red button [17], then adjust ◉.

Remote Commander does not function

- Replace the battery.

If you continue to have problems, have your TV serviced t qualified personnel. Never open the casing yourself.

Full-Function Side
Полно функциональная
Teljes Funkciós Oldal
Strana se všemi Funkcemi
Strona Funkcji Złożonych
Страна с Всички Функции
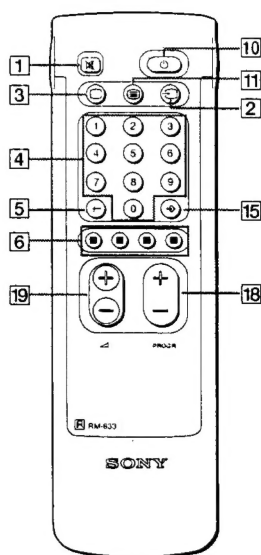
Simple Side
Простая Сторона
Egyszerü Oldal
Jednoduchá Strana
Strona funkcji podstawowych
Страна с Оиростени Функции